

Title (en)  
EXHAUST GAS PRESSURE LOSS CALCULATION DEVICE FOR ENGINE

Title (de)  
VORRICHTUNG ZUM BERECHNEN DES ABGASDRUCKVERLUSTES FÜR EINEN MOTOR

Title (fr)  
DISPOSITIF PERMETTANT DE CALCULER LA PERTE DE PRESSION À L'ÉCHAPPEMENT DANS UN MOTEUR

Publication  
**EP 2444608 A1 20120425 (EN)**

Application  
**EP 10845231 A 20100611**

Priority  
• JP 2010059940 W 20100611  
• JP 2010025846 A 20100208

Abstract (en)  
An object of the present invention is to provide a corrected exhaust gas pressure loss calculation device which corrects an exhaust gas pressure loss that varies from moment to moment in accordance with engine operating conditions to a corrected exhaust gas pressure loss that can be used directly in control. The present invention converts an exhaust gas pressure into the corrected exhaust gas pressure loss, which is an exhaust gas pressure loss under a reference condition, from a relationship between an exhaust gas mass flow rate and an exhaust gas mass flow rate under the reference condition, a relationship between an exhaust gas temperature and an exhaust gas temperature under the reference condition, a relationship between the exhaust gas pressure and an exhaust gas pressure under the reference condition, and a relationship between an exhaust gas viscosity coefficient under a condition of the exhaust gas temperature and a viscosity coefficient of a viscous gas under the reference condition.

IPC 8 full level  
**F01N 3/10** (2006.01); **F01N 3/021** (2006.01); **F01N 3/035** (2006.01); **F01N 9/00** (2006.01); **F01N 13/00** (2010.01); **F02D 41/00** (2006.01); **F02D 41/02** (2006.01); **F02D 41/14** (2006.01); **F02D 41/40** (2006.01)

CPC (source: EP KR US)  
**F01N 3/02** (2013.01 - KR); **F01N 3/106** (2013.01 - EP US); **F01N 9/002** (2013.01 - EP US); **F01N 11/00** (2013.01 - EP KR US); **F01N 11/002** (2013.01 - EP US); **F01N 13/0097** (2014.06 - EP US); **F02D 41/1445** (2013.01 - EP US); **F02D 41/1446** (2013.01 - EP US); **F02D 41/1448** (2013.01 - EP US); **F01N 3/021** (2013.01 - EP US); **F01N 3/035** (2013.01 - EP US); **F01N 2560/06** (2013.01 - EP US); **F01N 2560/07** (2013.01 - EP US); **F01N 2560/08** (2013.01 - EP US); **F01N 2560/14** (2013.01 - EP US); **F01N 2900/0406** (2013.01 - EP US); **F01N 2900/0601** (2013.01 - EP US); **F02D 41/0055** (2013.01 - EP US); **F02D 41/029** (2013.01 - EP US); **F02D 41/40** (2013.01 - EP US); **Y02T 10/40** (2013.01 - EP US)

Cited by  
CN111120046A; CN104838106A; EP3399165A1; CN108798841A; US10704437B2; US10371600B2; WO2014090701A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2444608 A1 20120425**; **EP 2444608 A4 20150114**; **EP 2444608 B1 20170802**; JP 2011163186 A 20110825; JP 5337069 B2 20131106; KR 101326432 B1 20131107; KR 20120024960 A 20120314; US 2012192635 A1 20120802; US 8596115 B2 20131203; WO 2011096099 A1 20110811

DOCDB simple family (application)  
**EP 10845231 A 20100611**; JP 2010025846 A 20100208; JP 2010059940 W 20100611; KR 20127000905 A 20100611; US 201013386076 A 20100611